

## **ABSTRACT**

The present disclosure relates to surgical instruments including a staple anvil formed in a distal end of the surgical stapler and a staple cartridge selectively receivable in a distal end of the surgical stapler and in juxtaposition relative to the staple anvil, the  
5 staple cartridge including one or more laterally spaced apart rows of staple slots formed in an upper surface thereof, a plurality of surgical staples disposed, one each, within the staple slots, and a staple line reinforcing system configured and adapted to augment the strength of the staple line formed by the firing of the surgical staples into body tissue, wherein the surgical stapler concomitantly drives the plurality of surgical staples through  
10 the adjacent layers of body tissue to mechanically secure the body tissue and activates the reinforcing system to non-mechanically secure the adjacent layers of body tissue to one another.

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(71) Applicant (for all designated States except US): **TYCO  
HEALTHCARE GROUP, LP** [US/US]; 150 Glover Av-  
enue, Norwalk, CT 06856 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HEINRICH, Russell**  
[US/US]; 11 Beaver Pond Road, Madison, CT 06443 (US).

(74) Agents: **AUDET, Paul, R.** et al.; Tyco Healthcare Group  
LP, 150 Glover Avenue, Norwalk, CT 06856 (US).

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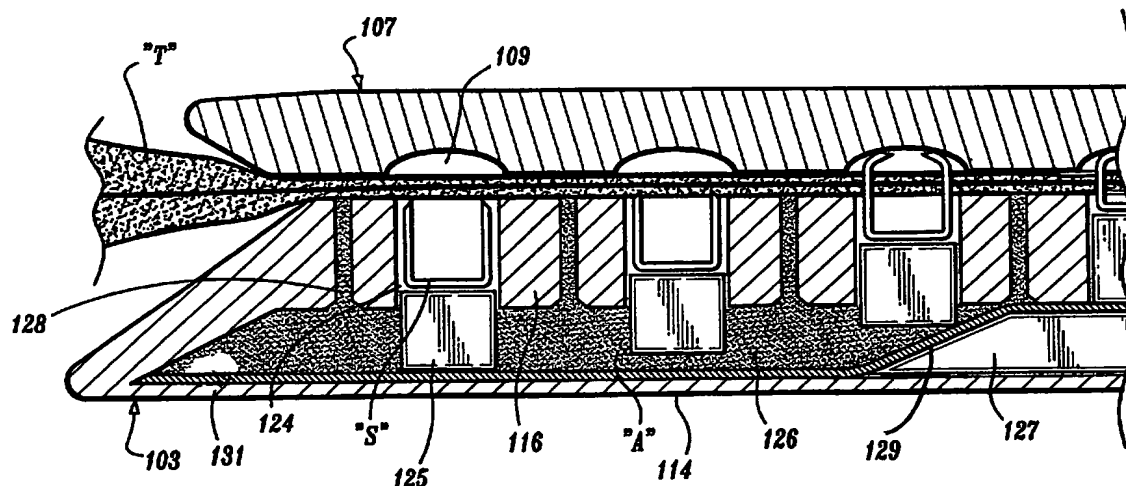
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(54) Title: **SURGICAL STAPLER AND METHOD**



(57) Abstract: The present disclosure relates to surgical instruments (100) including a staple anvil formed in a distal end of the surgical stapler and a staple cartridge (104) selectively receivable in a distal end of the surgical stapler and in juxtaposition relative to the staple anvil, the staple cartridge including one or more laterally spaced apart rows of staple slots (124) formed in an upper surface thereof, a plurality of surgical staples (S) disposed, one each, within the staple slots, and a staple line reinforcing system configured and adapted to augment the strength of the staple line formed by the firing of the surgical staples into body tissue, wherein the surgical stapler concomitantly drives the plurality of surgical staples through the adjacent layers of body tissue (T) to mechanically secure the body tissue and activates the reinforcing system to non-mechanically secure the adjacent layers of body tissue to one another.

WO 2003/088845 A3